and the opening up of vast territories, which at present are practically closed to commerce. Our proximity to the Orient, our position on the highways of commerce, our temperate and equable climate, give us opportunities and facilities for the study of disease enjoyed by no other State. The time has gone by when California can live for California alone; other countries and other States are doing, at a disadvantage, the work which has been brought to our door, and they have a right to demand that we assume the responsibilities that have come to us with increasing years. The small showing that this State has made in such work is not due to lack of ability on the part of her sons, for many of them have made reputations in other States and other countries. It is rather to be attributed to want of encouragement and an absence of the stimulus which arises when many observers are laboring together in the same field. These conditions are being rectified rapidly, and anyone who has taken the trouble to familiarize himself with the class of work that is being done by a large number of the younger men, must feel convinced that research will not cease for want of competitors. I may be wrong, but it appears to me that the greatest obstacle to the progress of medicine in our State is the attitude assumed by the individual members of the profession. Collectively, we are all right, will pass any number of resolutions having for their object the advancement of education; will appoint numerous committees, and even be willing to serve upon them, provided the chairman will do all the work; but, individually, there is an apathetic condition, a tendency to criticize harshly the efforts of others, and an attempt to excuse our inactivity by attributing it to a lack of interest shown by the public in affairs pertaining to medicine. In this we are unjust; it is for us to show that there is work to be done, to demonstrate that we are actually in earnest, and doing the best we can with the means at our command, and then outside aid will come. "God helps those who help themselves," and the people are very much of the same disposition.

Medical Education—The profession of medicine need not feel shame at any inquiry into the character of its regular practitioners, but only the self-satisfied among us would assert that even a higher level may not be attained. Considering the matter from the view-point of the profession, nothing could be more wholesome than a high standard of requirement for admission to membership in a body that has always been regarded by the public as one of general culture and intelligence. The country has grown rapidly and the medical curriculum has become exacting. Not unnaturally, therefore, some men have entered the profession without sufficient preliminary training. It is but natural to suppose that the exactions of the medical schools and the State boards of examiners will increase rather than decrease.—Pennsylvania Medical Journal.

## HOW FAR SHALL THE STATE RESTRICT INDIVIDUAL ACTION OF THE SICK, ESPECIALLY THE TUBERCULOUS?\*

By NORMAN BRIDGE, M. D., Los Angeles.

As to violently contagious and rapidly terminating diseases, like smallpox, scarlet fever, diphtheria and plague, the State has long exercised more or less control over the actions of the patients, and with the general acquiescence of the people.

Shall the State—and especially the State of California—undertake a similar restriction as to tuberculosis, which is a communicable, or, as some like to put it, a contagious disease, although usually slow in its progress and long continuing?

California may fairly consider this question in a different way from that proper for most States, for several hundred of tuberculous patients enter her borders each year—some to die, most to recover. These patients more or less menace the lives of the resident population of the State, and the latter may very properly ask that something be done to lessen the danger. The way to lessen the danger is to reduce the number of tubercle bacilli abroad, that come from human sputum.

I suppose there can be no question of the power of the State, under the Constitution, to regulate these matters, and to keep out people afflicted with contagious diseases (and perhaps even undesirable people), by means of any fair laws the Legislature may enact and the State be able to execute.

But laws must, in order to be executed, comport with the general sense of humanity and fairness held by the people, and they must not entail enormous difficulty and expense in the execution, unless in the face of some great and temporary public calamity.

While tuberculosis is a great public calamity in the spread of it from person to person, it is a calamity that is so slow in its progress and results, that the people become used to it, as the Cubans formerly were to yellow fever, and it is hard to arouse them to its dangers. It is fortunate that now public sentiment is becoming awake to the importance of this subject.

Two ways are open to protect the uninfected people of the State from Tuberculosis—the one, to prevent the coming of such patients hither; the other, to regulate the patients already here.

As to a large number of consumptives annually coming here, it would be far better for them, as well as for the State, if they never came; and they ought to be prevented from coming, if this were consistently possible. These patients are the hopeless cases, mostly of poor people, who are often unable to give themselves the comforts of life after they get here, and who almost without an exception, are careless

<sup>\*</sup>Read at the Thirty-third Annual Meeting of the State Society Santa Barbara, April 21-23, 1903.

about their sputum, which is the sole source of infection. Their hope and prospects are not enhanced by their coming, and there is only a single good purpose subserved by it, namely, the emotional one on the part of their friends and themselves that they have tried one final influence to save their lives. And the journey and sojourn have often entailed on their surviving relatives great hardships of debt, and deprivation for years after their death.

How can these unfortunate invalids be kept out of the State—perhaps kept at home, where they certainly ought to stay?

The moment we begin seriously to consider this question in a practical way, we are confronted with several difficulties of large proportion.

If it is resolved to keep such cases out, it is at once manifest that it cannot be accomplished by forbidding them to come. The only effective way would be to take steps to forcibly keep them out, if they attempt to come in. This would mean to attempt to guard nearly, or quite, three thousand miles of border, and especially to watch the four lines of railroad entering the State, and the dozen or more harbors on the coast. A medical inspector, of skill above the average, and capable of making critical examinations of the chest with a stethoscope, and of the sputum with the microscope, would have to be on duty at each of these points. At the railroad entrances and the active harbors, two or three such officers would be required, also several deputy sheriffs or marshals, to execute the adverse orders of the medical officers. All passenger trains would have to be delayed several hours till all the passengers could be examined. The general appearance of the travelers could not be relied upon to tell who are dangerous consumptives, for some mortally sick ones look in the face very well, and nine-tenths of all tuberculous patients could easily hoodwink any inspector who should be less critical than I have indicated.

Any law on the subject would probably be general, but suppose it should require that bad cases only be kept out, then broad discretionary powers would be lodged in the hands of medical officers. This would make the exclusion either thorough or farcical, according to the habits and inclinations of the officers. But all these officers and their necessary outfit would be needed at each point, if the exclusion were to be made effective, and the outfit might have to include a hospital ward, and would certainly include a large and manifold examining room. For, to make exclusion certain, every person would need to be stripped to the waist in a warm room, away from noise, and be examined critically; and some doubtful cases might require to be kept at the examining station several hours, to allow of the

accumulation and microscopic examination of sputum.

Since many of the trains enter the State at night, the passengers would have to be awakened and taken out into large rooms, and guarded against any of them slipping through without inspection, as is done in many custom houses in Europe and America.

If anyone thinks that this picture is fanciful, and the proposition too sweeping, let him draw the line and say how the end could be accomplished with less thoroughness, or in a simpler way.

The attempt to exclude would at once be met by the demand that patients and persons be admitted to the State, on presenting a clean bill of health from competent physicians outside. That might do; but what physicians outside the State? Would it be the home physicians of all these people, coming from many thousands of communities, in this country and abroad? If so, then the inspection would be easy, for a tuberculous person, who might wish to come, would naturally try to get some doctor to consent to certify that he had only a simple and harmless bronchitis-that would let him through, and the doctor living miles away might find his conscience accommodating. But all the physicians in the nation might not be trustworthy for this service, and certain ones might need to be designated; then the State would have a considerable task on its hands in this duty.

To carry out such a rigid inspection would probably cost the State from thirty to sixty thousand dollars a year, and might cost a hundred thousand.

If the exclusion was thorough, the consumptives would very soon cease to attempt, in any considerable numbers, to enter the State—then it would soon be claimed that a useless expense had been saddled upon the commonwealth, as the paid inspectors and other exclusion officers would have little to do, and there would be a clamor for the repeal of the law and the stopping of the expense, both of which would probably be done at a subsequent session of the Legislature. Then the consumptives would swarm hither again.

But any consumptive, able to travel a little, who might really desire to enter the State, could easily enough do so by coming in across the border away from the lines of travel. To keep such persons out, or to seriously attempt to, would require an espionage upon all newcomers in each community throughout the State, and the expulsion or imprisonment of persons found here unlawfully. This, too, would require the services of medical inspection officers in every part of the State—and these services would have to be paid for out of the public treasury; physicians would not do it for nothing, nor always

do it willingly. They would have to be compelled to do it, and might be careless in their examinations, or if they found a genial or wealthy consumptive here, who had recently arrived, and who desired very much to stay, they might, in some mysterious way, discover reason to guess that he contracted the disease after his arrival.

Another very practical difficulty would be the intense unpopularity such a measure would encounter from a large part of our own people, and from nearly all the world outside. damage to the State financially, socially and morally, would be many fold more than any benefit that could possibly come out of such an effort. The State and its people would be lampooned and caricatured from all quarters of the earth, and the people would soon see the academic absurdity, the utopian impossibility of the scheme. What the temper of the people would be found to be on this question may be inferred, when we consider the fact that over half of all the people are afflicted with tuberculosis in some part of their bodies, to some degree, at some time in their lives. The disease is extremely respectable, if majorities can make respectability.

A great deal of benefit may come of regulating consumptives within the State. Here is a possibility of doing incalculable good to both the sick and the well, and some systematic work of this sort ought to be undertaken at once by the State, the counties, and by municipalities.

Here are a few of the things that are proper and possible, and very urgently needed:

- 1. The government ought to transport indigent, immigrant consumptives back to their homes the moment they become a public burden, when this can be done without harm to them. This would tend to discourage such cases from coming.
- 2. The State ought to take care of its own indigent consumptives, and prevent them from infecting the community. This means public sanatoria for them. Such patients are to-day a constant menace to the people—for they are, most of them, utterly careless as to their sputum. In sanatoria they are always careful. The sanatoria would be expensive—but these patients to-day cost the State probably twice as much as they would cost in such institutions.

The argument that State sanatoria would invite vast numbers of the sick from other quarters, and so overburden us, is illogical and groundless. The other States of the Union are rapidly building such asylums, and in a few years California will have to do it to save her self-respect.

3. The government ought to make carelessness with tuberculous sputum a misdemeanor, punishable by fine of both the patient and his care-takers, and health departments ought to furnish printed rules for the care and destruc-

tion of the expectoration; also for disinfecting probably bespattered clothing.

- 4. Health officers ought to be required by law to instruct and caution known consumptives as to their duties and dangers, and their menace to others, and to punish them for neglect. These officers should invite physicians and laymen to furnish the names of tuberculous persons, especially those supposed to be careless. In some cities physicians are required, by law, to report all tuberculous patients to the health officers, the same as they do those of other contagious diseases. But I do not believe they generally do this; to make it compulsory is to array many against it, and lead to its frequent evasion. Yet the time will probably come when the majority of cases can be reported through such a regulation. Indeed, some of the advocates of this measure think that in New York City a large majority of the cases are now being reported. But the unreported cases have not been counted.
- 5. Health officers should be required, whenever asked to do so, and at public expense, to disinfect any room or house that has been occupied by a consumptive. On a death from tuberculosis being reported to them, they should promptly inform themselves whether carelessness as to the sputum has obtained in the care of the patient. If it has—or unless they have positive proof that it has not—they should insist on disinfecting the apartments.
- 6. It should be made a misdemeanor for any person, sick or well, to spit upon any walk, pavement or floor, indoors or out of doors, on which human beings habitually tread.
- 7. In all colleges, high schools, and the upper grades of all grammar schools, there ought to be introduced into the regular curiculum a course on the demonstrated facts as to the communicability of tuberculosis, as well as of other infectious diseases, and the means to prevent the spread of them. Such a course would be of immense value in circumscribing tuberculosis, but it would also be of great benefit as to typhoid and other fevers. Measures of this sort are educative of the public, and the great desideratum is to have all the people come to know the vast importance of having it made impossible for tubercle bacilli to become a part of the dust of the air from human sputum.

The people resent what they regard as official invasion of their legal rights of habitation, and free movement from place to place. Their sicknesses, they think, are a sufficient misfortune, without being, as they define it, punished by law in addition; and it will be necessary to educate them slowly, but that they can be educated on this question is as sure as fate. The people are sometimes very slow to learn new facts as to their protection of themselves, and they transmit from mouth to mouth, and from generation to

generation, the most transparent absurdities, as for example, the idea that night air is harmful to the sick; but when the truth is made plain to them, they are found ready to adopt it, and they will transmit that as faithfully as they did the falsehoods. But the medical profession has been extremely lethargic in this matter, and needs, itself, to be aroused to its duties and opportunities.

INTRAABDOMINAL SHORTENING OF THE ROUND LIGAMENTS FOR RET-RODISPLACED UTERI.\*

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RETRODISPLACEMENTS of the uterus have from the beginning of gynecic practice been a bete noir to the gynecologist. All manner of mechanical appliances have been invented to replace and retain the retroverted or retroflexed uterus. Numerous operations have been devised for the same purpose, and yet up to recently, few men have felt that any of the various methods were satisfactory, except in a small number of cases, in which some one of the various methods is applicable, or even indicated; but none of the older methods could restore the uterus to its normal position and at the same time retain its normal physiological condition.

Pessaries undoubtedly still have their place in the gynecologist's armamentarium, and should be used in cases in which the normal-sized uterus is retroverted, but easily replaced manually, and the patient unable to take treatment or be operated on, and unmarried. If the patient can take treatment for a sufficient length of time, some of these cases may be cured by massage, electricity and tampons. It usually requires from four to six months before any case can be considered cured by this method, and the patient is obliged to come to the office every day at first, and the treatment continued for at least six weeks after the pelvic organs are in apparently perfect condition.

The first operative procedure for the relief of retrodisplacements was ventro-fixation, which was done by Koeberle in 1869, and subsequently by Sims, in 1875. This operation has been modified in numerous minor ways, by varying the position of the sutures in the uterus and abdominal wall, and by using all manner of suture material. The operation, no matter how performed, is unphysiologic, and should only be made use of in cases of prolapsed uteri, in which cases, after having narrowed the vagina, it affords the best and surest means of retaining the prolapsed uterus.

The next operation which was suggested, was the shortening of the round ligaments by drawing them through the external abdominal rings. It was first executed on the living subject by Alexander, in 1881. This was also modified in every conceivable manner.

The operation is a good one in many cases, but has never appealed to me as a good surgical procedure, as the operator is obliged to work in the dark, and in case adhesions exist, it would probably result in failure. Duhrssen's method of vaginal fixation is only applicable in a few cases, and has been followed by fatal results in several cases in which pregnancy had occurred subsequent to operation.

In the majority of cases of retrodisplacement which require operation, it is also necessary, or at least advantageous, to examine the pelvic contents, with a view of determining the existence of adhesions, and rectifying any pathological condition of the adnexa. Wylie, Baer and Dudley each devised a method by intraabdominal folding of the round ligaments; the folds being held in position by several sutures. A large proportion of failures resulted, and the operation fell into disrepute. Webster drew the round ligaments through a hole in the broad ligament and sutured them on the back of the uterus.

The latest method is one devised by Baldy, and is a modification of Webster's; it consists in cutting off the round ligaments at their junction with the uterus, and drawing them through holes in the broad ligaments and suturing them on the posterior surface of the uterus. I have performed the operation in a number of cases, and so far, have been well pleased with the results, all of which have been successful, which is more than can be said of any of the other operations.

The technic which I have employed has varied slightly, according to the pathologic lesions present. The following cases will give an idea of the method:

Mrs. H., aged twenty-four years, had been having pain in the back and lower abdomen ever since the birth of her child, two years before. At the time I saw her she was just recovering from an acute exacerbation and had considerable tenderness over the right ovary and appendix, with the uterus retroflexed and adherent. On opening the abdomen the uterus was found bound down on the right side by an inflammatory mass, consisting of the tube and ovary, with the inflamed appendix firmly adherent. This was first separated and removed, and then the mass, consisting of tube and ovary, eneucleated. During the eneucleation, several cavities were encountered, which contained sterile pus; they were mopped out with formalin solution 1-1000. The uterus, after being liberated, still remained retroflexed, and I decided to shorten the round ligaments. A catgut ligature was first tied around the ligaments, close up to the uterus, and they were cut off on the distal side of the ligature. On the left side the cut end of the round ligament was drawn through the broad ligament, just below the tube, by means of a narrow Kocher forceps. On the right side, the tube and ovary having been removed, there was not enough broad ligament left to pass the ligament through, so it was passed around to the back of the uterus.